



TITLE:

Cover, Forward, Table of Contents

AUTHOR(S):

CITATION:

Cover, Forward, Table of Contents. Proceedings of the International Symposium on SEASTAR2000 and Bio-logging Science (The 5th SEASTAR2000 Workshop) 2004

ISSUE DATE:

2004

URL:

<http://hdl.handle.net/2433/44093>

RIGHT:



**Proceedings of the International Symposium on SEASTAR2000
and Bio-logging Science
(The 5th SEASTAR2000 Workshop)**

December 13 – 15, 2004

Imperial Tara Hotel, Bangkok, Thailand

Edited by Nobuaki Arai

Organized by

Graduate School of Informatics, Kyoto University

JSPS Bangkok Liaison Office

Japanese Society of Bio-logging Science

Informatics Research Center for Development of Knowledge Society Infrastructure



Forward

I would like to express my deep appreciation to you all for participating in the symposium on SEASTAR2000 and Bio-logging science. The SEASTAR is now in the second stage which started in 2004. The first stage project was supported by a Grant-in-Aid of the Ministry of Education, Sport, Science and Technology in Japan since 2001 and it was successfully finished in the end of 2003 fiscal year. The results of sea turtles were published in our proceedings. In the second stage, the workshop needs to include the various aquatic animal research fields in Asia, as well as sea turtle conservation research. The scientific theme is expanded from sea turtle to marine mammal, fish, environmental problems and bio-logging science. These are very important problems for Asia to urgently start.

The SEASTAR is supported by and linked now to many other big projects and academic scientific groups. This workshop is supported by the Department of Marine and Coastal Resource, the Department of Fisheries of Thailand, the Japan Society for the Promotion of Science (JSPS), and the Bangkok Liaison Office. We also established collaborative scientific linkage with Bio-logging Science in Japan, two 21st Century COE Programs of the Kyoto University and Kinki University. The theme of the 21st Century COE Program in Kyoto University project is “Informatics Research Center for Development of Knowledge Society Infrastructure” and Kinki University project is “Center of Aquaculture Science and Technology for Bluefin Tuna and Other Cultivated Fish”.

In the proceedings, there are many papers using bio-logging tools. Behavioral research by bio-logging tools is very useful to aquatic animals. The tools are now applied widely to marine mammals, fish, and other organisms. However analyzed data does not get effectively applied to either conservation or management of resources. I hope that the results of the symposium will increase the activities in various aspects especially biological marine science in Asia and encourage effectively our collaborative research.

坂本 亘

Wataru Sakamoto

SEASTAR Project DIRECTOR

Emeritus Professor of Kyoto University

Professor of Kinki University

Contents

Detection of multiple paternity in green turtle clutches during a reproductive season at Khram Island, Thailand NARONG MUJSUK, WANSUK SENANAN, SOMCHAI MONANUNSA and NARONGDET KAEWSA	1
Sea turtles and their conservation in Andaman and Nicobar Islands A.MURUGAN	6
Temperature dependent sex determination and hatching performance of green turtle (<i>Chelonia mydas</i>) at Chendor Rookery on the east coast of Peninsular Malaysia SYED ABDULLAH and MAZLAN ISMAIL	11
Aquatic mammals assessment in Indonesian waters NGURAH N. WIADNYANA, FEBRUANTY S. PURNOMO, RIA FAIZAH, P.LIZA K. MUSTIKA, D.OKTAVIANI, and MARIA M. WAHYONO	16
Sea turtle conservation management plan Phra Thong island, Thailand MONICA AUREGGI	21
Assessment of mitigation measures to reduce interactions between sea turtles and longline fishery MASASHI KIYOTA, KOSUKE YOKOTA, TAKAHIRO NOBETSU, HIROSHI NINAMI and HIDEKI NAKANO	24
Nesting and post-nesting studies of loggerhead turtles (<i>Caretta caretta</i>) at Omaezaki, Japan TAKAHIRO NOBETSU, HIROSHI MINAMI, HIROAKI MATSUNAGA, MASASHI KIYOTA, and KOSUKE YOKOTA	30
A female green turtle at Huyong Island rests at the drop off TOHYA YASUDA, NOBUAKI ARAI, KONGKIAT KITTIWATTANAWONG and WINAI KLOM-IN	34
A new technique for monitoring grazing behavior of Hawksbill turtles (<i>Eretmochelys imbricata</i>) using acceleration data loggers JUNICHI OKUYAMA, TOMOHITO SHIMIZU, OSAMU ABE, KENZO YOSEDA and NOBUAKI ARAI	37
Progress in EMCOR Information Center at Mae Pim beach, Rayong, Thailand CHANPEN WUTTHIVORAWONG, MICKMIN CHARUCHINDA, POTCHANA BOONYANATE and SUPAWAT KAN-ATIREKLAP	41
Analysis of stomach contents of dugongs (<i>Dugong dugon</i>) from Gulf of Thailand KANJANA ADULYANUKOSOL, PANTARAK BOUKAEW and ANUWAT PRASITTHIPORNKUL	45
An attempt on rearing a dugong calf (<i>Dugong dugon</i>) and its behaviors KANJANA ADULYANUKOSOL, KONGKIAT KITTIWATTANAWONG, KANOKSAK VIRIYAKUNPAT, ANUWAT PRASITTHIPORNKUL and CHANSIN CHANTHARATREERAT	52
Acoustic detection of dugong using automatic underwater sound monitoring systems : AUSOMS-D KOTARO ICHIKAWA, CHIKA TSUTSUMI, TOMONARI AKAMATSU, TOMIO SHINKE, NOBUAKI ARAI, TAKESHI HARA and KANJANA ADULYANUKOSOL	64
A visual-acoustic combined observation method to monitor seagrass bed utilization by dugongs (<i>Dugong dugon</i>) in a tidal flat CHIKA TSUTSUMI, KOTARO ICHIKAWA, TOMONARI AKAMATSU, NOBUAKI ARAI, TOMIO SHINKE, TAKESHI HARA and KANJANA ADULYANUKOSOL	69
Bio-logging science and new tools for marine bio-science YASUHIKO NAITO	72
Mechanisms of salmon homing migration from molecules to behavior HIROSHI UEDA	76
Remote acoustic monitoring of aquatic mammals TOMONARI AKAMATSU, DING WANG and KEXIONG WANG	79
Science and technology in Japan : activities of CRDS / JST KAYANO FUKUDA	84
The application of the biotelemetry to yellowtail aquaculture TOSHINORI TAKASHI, WATARU SAKAMOTO, TOSHIHIRO KUDOH and TOSHIHIKO KUBO	86
Correlation between oceanic environmental fluctuation and bluefin tuna behavior in the aquaculture pen TOSHIHIKO KUBO, WATARU SAKAMOTO and HIDEKI KUMAI	92
Depth-Temperature data logger revealed the fine-scale vertical movement of Mekong giant catfish <i>Pangasianodon gigas</i> in the reservoir HIROMICHI MITAMURA, YASUSHI MITSUNAGA, NOBUAKI ARAI, YUKIKO YAMAGISHI, TOMOHIRO NAKAO, KHACHA METHA, and THAVEWW VIPUTHANUMAS	98
Study on feeding habits of Mekong giant catfish in Mae peum Reservoir, Thailand YUKIKO YAMAGISHI, HIROMICHI MITAMURA, YASUSHI MITSUNAGA, NOBUAKI ARAI, KHACHA METHA, and THAVEE VIPUTHANUMAS	105
Study on behavioral characteristics of wild and hatchery-reared red tilefish TAKASHI YOKOTA, HIROMICHI MITAMURA, NOBUAKI ARAI, REIJI MASUDA, YASUSHI MITSUNAGA, HIROYUKI TAKEUCHI and TATSUO TSUZAKI	110